

and the distribution of damage between adults and juveniles suggests that the high rate of predation has been continuing for at least a year, and probably much longer.

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and L. E. SEDGWICK.

**The Rainbow Lorikeet (*Trichoglossus moluccanus*) in Perth, Western Australia.**—On 31 March 1968 I heard and saw a pair of strange lorikeets flying westward over Wembley. They were too large for *Glossopsitta*. The sun momentarily caught the red breast of one bird, confirming my suspicion that they belonged to *Trichoglossus*. The birds flew close together; their plump bodies, rapid wing-beats, direct unwavering flight, and occasional screeching call-note at once distinguished them from all local parrots of similar size.

From that time until December 1971 I have received a dozen reports of one to six large lorikeets in certain suburbs of Perth, viz. Crawley, Shenton Park and Daglish. Most of the observations were in the grounds of the University at Crawley. The most outlying record was from Gooseberry Hill, where two birds were seen perched on a Marri (*Eucalyptus calophylla*) on 11 April 1972. The birds in the metropolitan area were seen to feed at the flowers of the Lemon-scented Gum (*Eucalyptus citriodora*), Marri (*E. calophylla*), Red-flowering Gum (*E. ficifolia*) and Coral Tree (*Erythrina indica*).

Only one observer (Mr. Robert Humphries) noted the colour of the neck-band. It was clearly not red, which precludes the Red-collared Lorikeet (*T. rubritorquis*) of northern Australia, from the Kimberley Division east to northern Queensland. Presumably the present birds are the Rainbow Lorikeet (*T. moluccanus*) of eastern Australia, south from Cape York to Victoria and southern South Australia.

Because of their vigour and aloofness, I believe these birds are not escapees from captivity but reached Perth unaided from south-eastern Australia. The nearest population of Rainbow Lorikeets is that of Eyre Peninsula, 1,200 miles east of Perth. Most of the intervening region is well wooded with eucalypts and melaleucas, flowers of which should sustain west-bound lorikeets. The least favourable tract Rainbow Lorikeets would have to cross is the one to two hundred miles of sparsely wooded country round the head of the Bight. Such a crossing, however, should not be difficult for strong-flying birds like these. But what would impel them to cross such a relatively inhospitable tract? One possibility is that most eucalypts failed to flower in south-eastern Australia during the great drought of 1967.

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**On Egg Deposition by Cuckoos.**—In this journal, 12 (3), February 1972: 69 appears an article under the title "Egg Deposition by Golden Bronze Cuckoo in a Yellow-tailed Thornbill's nest", which contains information that I feel requires further comment.

Whilst it is my belief that photographic evidence will be necessary to finally and conclusively prove the method of placement of eggs by cuckoos into domed nests, certain physical facts cannot be ignored, as they may have been by those who hold to the view expressed by Robin Hill (*Australian Birds*, 1967, p. 117) and repeated in the above-mentioned article.

These physical facts are:—

(a) Some dome-shaped nests have long and steeply upward sloping entrance tunnels leading to the egg chamber, particularly so in Australia in the case of the genus *Gerygone* and to a lesser extent the genus *Acan-*

*thiza*. In some cases the distance between the commencement of the tunnel and the lip of the egg chamber is as much as 40 mm and may be more, whilst the internal diameter of the tunnel is often 20 mm and less. I find it difficult to accept the contention that a bird could "eject" an egg upwards with sufficient force to propel it into the egg chamber of such nests. Likewise I find it difficult to accept that a cuckoo could so contort its body as to allow it to gently deposit an egg in such a chamber and yet keep its wings and tail outside the nest.

(b) The smaller cuckoos and most of their hosts, particularly warblers and thornbills, lay eggs with shells that are fragile and easily dented, cracked or broken. One of these eggs dropped on another from as low as 15 mm or 20 mm will frequently cause a dent in the shell of one or the other. A cuckoo's egg "ejected" into a nest would almost certainly cause a dent in any egg if struck when landing or coming to rest or receive damage to itself, yet it is a rare occasion when one finds any of the eggs in a nest parasitised by a cuckoo, other than the Channel-billed Cuckoo (*Cythrops novaehollandiae*) in a damaged state.

In presenting these two facts I am not rejecting the possibility that cuckoos may at times deposit eggs in dome-shaped nests by the method described by Hill, but I do feel that this method could only be used on domed nests with short horizontal entrance tunnels or with side entrances without tunnels, such as those constructed by the members of the genus *Malurus*. In actual fact two of the most common hosts to our smaller cuckoos are the various members of the genus *Gerygone* and *Acanthiza*.

Finally, it is usual, in fact almost invariable practice for cuckoos, at least in Australia, to remove one of the eggs of the foster species from the nest, either before or after deposition of their egg. If this were not so, one would expect to frequently find *Acanthiza* nests with four and five eggs, including a cuckoo's egg, or *Gerygone* nests with four eggs including a cuckoo's egg and so on, whereas such findings are indeed uncommon. To remove an egg from a nest a cuckoo must of necessity enter the nest, at least partially, to enable it to pick up an egg and remove it. In addition, the cuckoo removes the egg some distance from the nest, not simply dropping it beneath the nest. If they are capable of lifting a host's egg from the nest and carrying it away, I see no reason to doubt that they could not or would not place their own egg into the nest in a similar manner.

—GORDON R. BERULDSEN, Kenmore, Queensland.

## EXCURSIONS

### PENGUIN ISLAND, SAFETY BAY

On May 4th and 5th, 1972, members of the Western Australian Naturalists' Club held an excursion to Penguin Island, during which an ecological survey of the island's plants was made. Not all those taking part had done any type of ecological recording before. Therefore the two exercises that were completed were intended to introduce members to some of the methods that can be used.

On May 4th, 14 members made a belt transect of the island from east to west across the highest point. All plants within a square metre of the tape were recorded, and the height above sea level was also measured.

On May 5th, seven people took part in a general survey of the island (excluding the bird sanctuary, as it was thought that it would cause too much disturbance to the nesting gulls). The survey was accomplished by spreading out in a line across the island and, when in position, each observer recorded all the plants visible within a 10 ft. radius of where he stood. The whole line moved forward for 50 paces, halted, and recorded again. This manoeuvre was repeated a number of times until the southern cliffs were reached.